Pacific Cod Disaster Funding - 2018 Gulf of Alaska **FY2022 Request: $1,000,000**
Reference No: 63239

AP/AL: Appropriation
Project Type: Research / Studies / Planning
Category: Natural Resources
Location: Statewide
House District: Statewide (HD 1-40)
Impact House District: Statewide (HD 1-40)
Contact: Sam Rabung
Estimated Project Dates: 07/01/2021 - 06/30/2026
Contact Phone: (907)465-4210

Brief Summary and Statement of Need:
The Secretary of Commerce announced on February 27, 2020, that the National Marine Fisheries Service (NOAA Fisheries) allocated $24,416,440 for 2018 Gulf of Alaska Pacific cod fishery disaster relief. The State of Alaska is working with affected stakeholders and NOAA Fisheries to identify funding priorities and develop a distribution plan for the disaster funds. The Pacific States Marine Fisheries Commission will administer the federal grant and distribute funds. Part of the funding may be allocated to the Department of Fish & Game for research and administrative support. This funding is estimated to be approximately $1,000,000.

Funding:	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	Total
1002 Fed Rcpts	$1,000,000						$1,000,000
Total:	$1,000,000	$0	$0	$0	$0	$0	$1,000,000

☐ State Match Required ☑ One-Time Project ☐ Phased - new ☐ Phased - underway ☐ Ongoing
0% = Minimum State Match % Required ☐ Amendment ☐ Mental Health Bill

Operating & Maintenance Costs:

	Amount	Staff
Project Development:	0	0
Ongoing Operating:	0	0
One-Time Startup:	0	
Totals:	0	0

Prior Funding History / Additional Information:

Project Description/Justification:
Please note this plan is still being formulated and going through the public comment process. Final funding amounts are subject to NOAA Fisheries approval and research project selection through an open competitive bidding process.

The 2018 Pacific cod fishery disaster resulted from warmer than average ocean conditions, among other factors, beyond the control of fishery managers that reduced biomass and access to the fishery. Funds will be used for scientific research activities to better understand the effects of warming temperatures on GOA Pacific cod and to improve our ability to manage the GOA Pacific cod stock in the future. Information from NOAA Fisheries shows that over the past 6 years, the GOA has been experiencing extended and severe marine heatwaves. From June 2014 to January 2017 the North Pacific, including the GOA, had increased temperatures over a region of approximately 2 million km2 with more than 2.5 °C warmer than the long-term mean (1982 to 2012). The 2014 to 2016 marine

heatwave changed the ecology of the region with reduced phytoplankton production, a shift in zooplankton production from large lipid-rich (higher fat) copepods to small lipid-poor copepods, and reduced forage fish populations such as capelin and Pacific sand lance. Species at the top of the marine food chain, including Pacific cod, experienced lower recruitment (reduced juvenile survival) and increased mortality was documented in fishes, birds, and mammals. Research funds will be available by competitive bid. Funds will be available for scientific research projects that provide information to help fishery scientists and managers to assess GOA Pacific cod stock conditions and develop conservation and management measures for the GOA Pacific cod fishery in response to warm water and other variable ocean conditions. The primary goals of research funds are to further our understanding of the cause of the 2018 GOA Pacific cod fishery failure and to help managers avoid and mitigate the impacts of future Pacific cod fishery disasters that cannot be prevented. Based on consultations with GOA Pacific cod assessment scientists and managers, ADF&G recommends funding research projects that are focused around three linked themes:

1) Better understanding the effects of warming temperatures on Pacific cod ecology and population dynamics, with a focus on parameters to improve the stock assessment (e.g. mortality, growth, maturity). 2) Expanded early life history studies (spawning, larval, age-0) to focus on spatial-temporal variation in stock reproductive output, survival processes, and how these vary with changes in climate. 3) Resolving stock spatial structure, migration patterns, and connectivity based on new genetics/genomics approaches. Research may cover a wide range of methods, including understanding early life history, tagging, modelling, genetics, surveys, and maturity.

Program Support: The Alaska Department of Fish and Game (ADF&G) is proposing to allocate funds for staff time dedicated to fishery disaster plan development and implementation in coordination with Pacific States Marine Fisheries Commission (PSMFC). ADF&G is proposing to allocate funds to cover salary and benefits for a Program Coordinator position to oversee the fishery disaster program on behalf of the State of Alaska. Fishery disaster coordination is not expected to require full-time year-round work. Funding for this position is expected to cover an average workload of 37.5 hours per month plus indirect costs.